

REMARKS

The present invention is directed to a soundproofing and thermally insulating element which includes a panel of rigid polyurethane foam with greater than 90% closed cell content. The surface of this panel must have from 1 to 18 depressions per square centimeter. These depressions must have a diameter of from 0.1 to 10 mm and a depth of from 10 to 70 mm. At least two types of depressions which differ in at least one dimension must be present.

Claims 1-10 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al (U.S. Patent 5,770,635) in view of Becker et al (U.S. 2002/0179367). Applicant continues to respectfully traverse this rejection.

The Lee et al and Becker et al references were discussed and distinguished over the claimed invention in Applicant's previous response. This discussion will not be repeated. Rather, Applicant will address the specific points raised in the Office Action of March 3, 2006.

It is argued in the Office Action that while Lee et al does not particularly recite formation of slots or depressions in the surface of the formed articles disclosed therein, it would have been obvious for one skilled in the art to employ the surface perforation operations of Becker et al to the surfaces of Lee et al's formed articles for the purpose of improving the sound absorbing properties of the articles formed "in order to arrive at the products of applicants' claims..."

Applicant respectfully disagrees.

The rigid insulating foams of Lee et al are completely different types of materials than the molded articles having an integral skin disclosed by Becker et al. The problem addressed by Lee et al (i.e., dimensional stability) is unrelated to the problem of sound absorption addressed by Becker et al. Further, there is no teaching in Becker et al that perforation of the Lee et al rigid foams would not adversely affect the dimensional stability of a perforated rigid foam of the type taught by Lee et al.

It is well established that the fact that disclosures can be combined does not make the combination obvious unless the art also contains something to suggest the desirability of the combination. In re Imperato, 179 USPQ 730 (CCPA 1973).

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In the present case, the Lee et al reference is silent with respect to depressions on the surface of the disclosed rigid foams. Lee et al does not even mention sound absorption much less suggest that the disclosed foams should be used for such applications. Lee et al is specifically directed to improvement of dimensional stability of low density foams for use in insulation applications. No relationship between dimensional stability, sound absorption or surface depressions is taught or suggested by Lee et al. However, one skilled in the art seeking to develop insulating foams would hardly consider it obvious to perforate the foam surface because such perforation would open the foam cells. Such cell opening would be expected to have an adverse effect upon stability and allow the insulating gas present in those cells to escape.

The Becker et al reference is directed to foams with an integral skin. It is this integral skin, not the foam cells which are perforated by Becker et al.

Applicant maintains that the teachings of Becker et al with respect to perforation of the skin of the molded articles disclosed therein would not suggest that there would be any advantage to perforation of the Lee et al insulation foams.

One skilled in the art would not therefore combine the teachings of Lee et al and Becker et al in the manner suggested by the Examiner.

Applicant would further point out that neither Lee et al nor Becker et al teaches the number of depressions, size of depressions or the need for two different sized depressions required in Applicant's claimed invention. These references do not therefore provide the required factual basis to support a rejection under 35 U.S.C. §103.

It was also argued in the Office Action that Applicant's claims set forth no degrees of difference between the two different types of depression required so as to distinguish over the "natural variations in sizes of perforations arising from imperfections associated with real world practice of the disclosed operations of Becker et al."

Applicant respectfully disagrees. Becker et al's perforations are made in the integral skin of the foam-not the foam itself. Applicant's claims require depressions in the rigid polyurethane foam.

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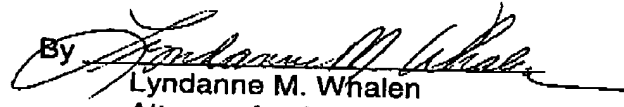
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Applicant's claims do therefore clearly distinguish the depressions of the present invention from the perforations in the molded articles of Becker et al.

Withdrawal of this rejection is therefore requested.

In view of the above remarks, reconsideration and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,

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